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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/858,312 | 05/15/2001 | Paul K. Mui | 10007045-1 | 1482 |

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HEWLETT-PACKARD COMPANY
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EXAMINER

WORKU, NEGUSSIE

ART UNIT PAPER NUMBER

2626

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/858,312

Applicant(s)

MUI ET AL.

Examiner

Negussie Worku

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

However, applicant's arguments, filed September 15, 2005, with respect to the rejection(s) of claim(s) 1-8 under 35 U.S.C. 102(b) have been fully considered persuasive, and therefore, upon further consideration, a new ground(s) of rejection is made over Rackman (USP 6,323,961) in view of Pryor et al. (USP 4,739,414).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rackman (USP 6,323,961) in view of Pryor et al. (USP 4,739,414)

With respect to claim 1, Rackman discloses a method of scanning an object (image reading apparatus 10 reads an original (object) as shown in fig 2 and 3) including the steps of: moving a first scan line during the scanning relative to the object in a top to bottom scan direction (a scanner 10 of fig 2 traveling relative to the object or original to be scanned, see (col.3, lines 65-col.4, lines 1-5); indexing a plurality of cross linear samplings in a forward sequential order (a sensor which can travel in a reciprocative manner, for reading out an image of the original on the holder line by line [indexing of sequential order] on a forward route and backward route, see col.4, lines 1-25; and indexing a plurality of cross linear samplings in a reverse sequential order,(reading out an image of the original line by line [indexing of sequential order] on a forward route and backward route, see col.3, lines 65 through col.4, lines 1-25).

Rackman does not disclose or teach moving a second scan-line during scanning relative to the object in a bottom to top scan direction.

However, Pryor in the same area of image reading and processing device teaches moving a second scan-line relative to the object in a bottom to top scan direction, (moving the image reader to the both direction, see (col.9, lines 31-37).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus of Rackman to include: moving a second scan-line relative to the object in a bottom to top scan direction.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Rackman imaging device by the teaching of Pryor et al. for the purpose of obtaining compensated illumination intensity, and reduce the movement of the scan carriage and scanning time.

With respect to claim 2, Rackman discloses the method of scanning an image (image reading apparatus 1 reads an original (object) as shown in fig 2 and 3) wherein the object (original placed on platen 18 of fig 1) further comprises an image bearing media (original shown in fog 2 and 3, is to be scanned by scanner as image bearing media).

With respect to claim 3, Rackman discloses a method of scanning image bearing media (image reading apparatus 1 reads an original (image bearing media) as shown in fig 1-3) including the steps of: scanning a first image bearing media in a top to bottom scan direction, (a scanner 10 of fig 1 traveling relative to the original to be scanned); indexing a plurality of cross linear samplings in a forward sequential order, (an image or original is read in a top-bottom direction which is in a sequential order of line by line, as shown by fig 2 and 3, as discussed in col.3, lines 60-65 through col.4, lines 1-25); and indexing a plurality of cross linear samplings in a reverse sequential order, see (col.4, lines 5-25).

Rackman does not disclose or teach moving a second scan-line relative to the object in a bottom to top scan direction.

However, Pryor in the same area of image reading and processing device teaches moving a second scan-line relative to the object in a bottom to top scan direction, (moving the image reader to the both direction, see (col.9, lines 31-37).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus of Rackman to include: moving a second scan-line relative to the object in a bottom to top scan direction.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Rackman imaging device by the teaching of Pryor et al. for the purpose of obtaining compensated illumination intensity, and reduce the movement of the scan carriage and scanning time.

With respect to claim 4, Rackman discloses a method of scanning image bearing media (image reading apparatus 10 reads an original (image bearing media) as shown in fig 2 and 3) including the steps of: feeding the first image bearing media from an automatic document feeding device to the scanning device (a fax of fig 1, which controllers the reading process of scanner 10, inherently provides a document feeding device for moving the in coming document shown in fig 2 and 3, for transporting original to the scanning position of the scanner, see col.3, lines 49-55); and feeding the second image bearing media from the automatic document feeding device to the scanning device, see (col.3, lines 33-35).

With respect to claim 5, Rackman discloses a method of scanning image bearing media a flatbed scanning device (image reading apparatus 1-3, having platen which support original) including the steps of: feeding a first image bearing media (inputting [feeding the original] original document to be read) from an automatic document feeding device (in coming document, transported by a means document feeding mechanism, see col.3, lines 49-52); scanning the first image bearing media in a top to bottom scan direction (reading one of the plurality of image bearing media (original) in a reciprocating movement of the scanner 10 of fig 1, see col.3, lines 25-30); indexing a plurality of cross linear samplings in a forward sequential order, (the scanner 10 of fig 1, reads the image in line by line scanning method , see (col.4, lines 5-25); feeding a second image bearing media from the automatic document feeding device (in coming original by document feeding [inputting 32 of fig 1], feed the original to the position relative to the scanner 10 of fig 1) to the scanning device (scanner 10 of fig 1); and indexing a plurality of cross linear samplings in a reverse sequential order, (reading out an image of the original line by line [indexing of sequential order] on a forward route and backward route, see (col.4, lines 5-25 and col.3, line 65-68).

Rackman does not disclose or teach moving a second scan-line relative to the object in a bottom to top scan direction.

However, Pryor in the same area of image reading and processing device teaches moving a second scan-line relative to the object in a bottom to top scan direction, (moving the image reader to the both direction, see (col.9, lines 31-37).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus of Rackman to include: moving a second scan-line relative to the object in a bottom to top scan direction.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Rackman imaging device by the teaching of Pryor et al. for the purpose of obtaining compensated illumination intensity, and reduce the movement of the scan carriage and scanning time.

With respect to claim 6, Rackman discloses a method of scanning image bearing media (image reading apparatus 10 reads an original (image bearing media) as shown in fig 1) including the steps of: sensing a carriage assembly travel direction (controller 12 of fig 1) drives and control travel direction of the scanning system, see (fig 1-3)

With respect to claim 7, Rackman discloses a method of scanning image bearing media (image reading apparatus 10 of fig 1, reads an original (image bearing media) as shown in fig 1) including the steps of: sensing a carriage assembly travel limit, (controller 32 of fig 1, [input–output mechanism of fig 1], drives and control travel direction of the scanning system, see (fig 1).

With respect to claim 8, Rackman discloses an optical scanning device (as shown in fig 1-2) for producing machine-readable data representative of an object

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(original positioned to be read by scanner 10 of fig 1) comprising: a scanner controller (a control portion 32, of scanner apparatus 10 of fig 1); a transport assembly (input-output mechanism 30 and 32 of fig 1, connected to the scanner controller 12 of fig 1), for moving a scanline relative to the object in a top to bottom scan direction followed by moving the scanline relative to the object in a bottom to top scan direction, see (col.4, lines 1-25); an imaging assembly (scanner of fig 1) connected to the scanner controller (controller 12 of fig 1) and or in successive sampling intervals for generating a plurality of cross linear samplings image data representative of the object, (original of fig 2); an automatic document feeder (fax input, 32 for feeding original) connected to the scanner control (112 of fig 1) operable in response to the scanner controller (12 of fig 1 and 2), a processing device (a processor 12 of fig 1) responsive to a scan direction travel limit for selectively indexing a plurality of cross linear samplings in a forward sequential order, see (col.4, lines 5-25), and a processing device (20 of fig 2) responsive to a scan direction travel limit for selectively indexing a plurality of cross linear samplings in a reverse sequential order direction (controller 12 of fig 1, carries out the entire control of the image reader, (scanner 10 of fig 1), see (col.4, lines 5-25).

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

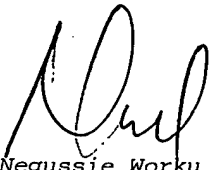
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Negussie Worku whose telephone number is 305-5441. The examiner can normally be reached on 7am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on 703-305-4863. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should


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Negussie Worku

12/19/05



MARK WALLERSON
PRIMARY EXAMINER